

Serial Number: 10/708,393
Filed: 2/27/2004

SABCOCK IP

Claim Amendments

1. (currently amended) A radome with the a front/back ratio reduction characteristic for a reflector antenna, comprising:

a radome in contact with a conductive ring having an inward facing edge proximate a periphery of the radome;

the inward facing edge extending inward along the radome at least to an inner diameter of a distal end of a main reflector of the reflector antenna.

2. (original) The apparatus of claim 1, wherein the conductive ring extends from an inside surface to an outside surface, around a periphery of the radome.

3. (canceled)

4. (original) The apparatus of claim 1, wherein the conductive ring is one of metallised, electrodaged, and over molded upon the radome.

5. (original) The apparatus of claim 1, wherein the conductive ring is one of metal, metallic foil, adhesive foil and a conductive rubber coupled to the radome.

6. (original) The apparatus of claim 1, wherein the conductive ring is a plurality of electrically isolated segments.

7. (original) The apparatus of claim 1, further including an absorber coupled to the inside of the radome periphery.

8. (previously submitted) The apparatus of claim 7, wherein the absorber is one of a foam ring and an absorbing surface coating.

Serial Number: 10/708,393
Filed: 2/27/2004

BOEING IP

9. (original) The apparatus of claim 2, wherein the conductive ring on the outside surface has a smaller inner diameter than the conductive ring on the inside surface.
10. (previously submitted) A method for reducing the front / back ratio of a reflector antenna, comprising the steps of:
coupling a conductive ring having an inward facing edge to a periphery of a radome of the reflector antenna;
the inward facing edge extending inward along the radome at least to an inner diameter of a distal end of a main reflector of the reflector antenna.
11. (original) The method of claim 10, wherein the conductive ring is coupled to the radome by one of metalising, electrodaging, and over molding.
12. (original) The method of claim 10, wherein the conductive ring is formed from a plurality of electrically isolated segments.
13. (original) The method of claim 10, wherein the conductive ring is coupled to the conductive ring whereby it extends around the periphery from an inside surface to an outside surface.
14. (original) The method of claim 13, wherein the conductive ring on the outside surface has a smaller inner diameter than the conductive ring on the inside surface.

Serial Number: 10/708,393
Filed: 2/27/2004

babcock ip

15. (currently amended) A reflector antenna with ~~the~~ a front/back ratio reduction characteristic, comprising:

a sub reflector positioned to redirect an RF signal from a feed to illuminate a reflector;

a radome adapted to cover an open distal end of the reflector; and

a conductive ring coupled to the radome, the conductive ring having an inward facing edge extending inward along the radome at least to an inner diameter of a distal end of the reflector proximate a periphery of the radome.

16. (original) The apparatus of claim 15, wherein the conductive ring extends from an inside surface to an outside surface, around a periphery of the radome.

17. (original) The apparatus of claim 15, wherein the conductive ring has an inner diameter proximate an inner diameter of a reflector dish open end.

18. (original) The apparatus of claim 15, wherein the conductive ring is one of metalised, electrodaged, and over molded upon the radome.

19. (original) The apparatus of claim 15, wherein the conductive ring is one of metal, metallic foil, adhesive foil and a conductive rubber coupled to the radome.